

Name \_\_\_\_\_

Date \_\_\_\_\_

West Islip Technology Department

Period \_\_\_\_\_

## The Basic Electrical Circuit and its Parts

- A basic electrical circuit consists of three main parts: a \_\_\_\_\_, \_\_\_\_\_, and its \_\_\_\_\_.
  - o An example of a source of voltage is a \_\_\_\_\_.
  - o An example of a load is a \_\_\_\_\_.
  - o An example of a conductor is a \_\_\_\_\_.
- \_\_\_\_\_ is the force behind electron flow.
- The \_\_\_\_\_ is the electrical unit used to express the amount of electrical pressure present, or the amount of electrical force produced by the chemical reaction inside the battery.
  - o The \_\_\_\_\_ (hot wire) for a battery goes to the \_\_\_\_\_ connection.
  - o The \_\_\_\_\_ (ground wire) for a battery goes to the \_\_\_\_\_.
- Electrical \_\_\_\_\_ is the flow of electrons.
- The amount of electrons flowing past any given point in one second is rated in the electrical unit \_\_\_\_\_.
- All electrical circuits have \_\_\_\_\_. Resistance is the opposition to the flow of electrons.
- Resistance is measured in the unit known as \_\_\_\_\_, and the electrical symbol for ohm is  $\Omega$  (\_\_\_\_\_).
- A good \_\_\_\_\_ of electricity is anything that permits the free flow of electrons.
  - o Examples: copper, iron, steel, aluminum, silver, tin, damp earth, and salt water

## **The Basic Electrical Circuit and its Parts cont...**

- A poor conductor of electricity is a material that will not permit the free flow of electrons, and this is known as an \_\_\_\_\_.
  - o Examples: glass, mica, porcelain, air, dry wood, sand, distilled water, some plastics, paper, rubber, and oil.
  
- A \_\_\_\_\_ is a material that limits the flow of free electrons, and is considered to be neither a good or poor conductor of electricity.